



ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

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Vol. 5 No. 7

July 2002

● Space Still Available For Technical Training In Spokane And Yakima Locations Only

Stakeholder registrations from our list server filled the available space in the July 18th and 25th (Tumwater and Everett) technical training sessions within two days of the first announcement. However, there is still stakeholder space available for the **Spokane and Yakima classes**. The training is available to contractors, electricians, trainees, engineers, and any other interested individuals in the electrical industry.

The training will cover Emergency and Standby Power Systems, Health Care Facilities, and Fire Pumps. The instructor will be Bruce Reynolds, the Labor and Industries electrical plan review supervisor. We will offer **eight (8) free hours of electrical continuing education units (CEU's)** to all individuals that attend the training. The sessions are from 8 AM to 5 PM at these locations.

July 30, 2002 West Coast Yakima Center Hotel, 607 E Yakima Avenue, Yakima

August 1, 2002 Spokane Community College, Lair Building, N 1810 Greene Street, Spokane

The first newsletter announcement (June) allowed registration by postal mail only. **Due to the short time between distribution of this newsletter and the class dates, we will allow registration by E-mail.**

Interested persons should send an E-mail to LISS235@LNI.WA.GOV and include: 1) your name and E-mail address and, 2) identify the session you want to attend. We will confirm your space by return E-mail. **Space is first-come, first-served and limited.** If you do not receive confirmation before July 26th, do not attend the training.

● Kitchen Counter Outlet Spacing

NEC 210-52(c)(1) details small appliance outlet spacing requirements at "wall counter spaces" for kitchen countertops. Where windows are installed less than five inches above the countertop behind a kitchen sink, making it impracticable to install a required outlet(s) in the wall, the required outlet(s) may be relocated as near as possible to the edge of the window. This allowance is currently under review in the WAC development process and does not remove the need for any outlet required by the NEC.

● Certificates Will Be Suspended If CEU Courses Cannot Be Verified

The department has begun random audits of CEU class rosters. The audit verifies that electricians have completed the courses listed on their renewal applications. Because of the new "honor system" for reporting CEU's and the new audit process, it is important for all electricians to keep the original copies of their CEU course attendance certificates in a safe place. An electrician's certificate of competency will be suspended if discrepancies are found between the instructor's course roster and the electrician's renewal application. In order to prevent discrepancies, make sure your name, certificate number, and social security number appear fully and legibly on the instructor's class roster.

When improper reporting of CEU's is discovered, a letter will be sent to the electrician informing them of the discrepancy. The electrician will have twenty days to provide copies of the requested class certificates. If the submitted course(s) are false or there is no response after twenty days, the certificate of competency will be suspended and will remain suspended until all CEU requirements are met and the certificate is reinstated. **A suspended electrician can continue to work only if the electrician obtains a training certificate and works under the supervision of an appropriate specialty or journeyman electrician.**

Electricians working or taking continuing education courses outside of Washington still need to include copies of their out-of-state CEU certificates with their Washington certificate renewal applications.

A complete list of approved Washington CEU classes, correspondence courses, and online courses is available on our website at: <http://www.lni.wa.gov/scs/electrical/cehome.htm> and general CEU information at (360) 902-5269 and specific CEU audit information at (360) 902-5284.

● Limitations For A Variance

Variance requests are not intended to offer an alternative to the requirements for equipment and materials found in RCW 19.28.010(1). The purpose of a variance is to allow safe deviation from specific installation requirements of the National Electrical Code (NFPA 70), Revised Code of Washington (RCW 19.28), and Washington Administrative Code (WAC 296-46A). If equipment or materials are not listed/field evaluated or if that equipment is modified in any manner not allowed in the original listing/field evaluation documentation, a variance request is not a permissible means to get it approved. Equipment that is not listed or field evaluated or has been modified must be replaced with properly listed equipment or field evaluated by an approved product-testing laboratory. Note that industrial control panels and equipment may be approved using a special department inspection.

● 48 VDC Power Supplies For Telecom Service Provider's Telephone Equipment

The existing RCW 19.28.151 language "*all electrical wires, apparatus, installations or equipment used or to be used by a telegraph company or a telephone company in the exercise of its functions*" has always been interpreted to include 48 VDC rectifiers and downstream DC conductors in exempt status, as long as the installation was "*located outdoors or in a building or buildings used exclusively for that purpose,*" (i.e. a "central office" type of environment).

The existing statutory language dates back to the systems installed prior to 1973. Today "central office" type equipment and functionality is installed, owned, and exclusively controlled by telephone (utility) service providers in dedicated portions of buildings that have other occupancies. NEC 90-2(b)(4) has long exempted telecommunications installations "*located outdoors or in building spaces used exclusively for such installations.*" For decades telephone companies have safely used wiring methods for their 48 VDC power distribution systems that are not addressed by the NEC.

We have received recommendations for rule revision that recognizes the modern structure of telecommunications distribution systems. While the revisions are in progress, details of RCW 19.28.151 will be interpreted more in line with the NEC as follows: "*Building or buildings used exclusively for that purpose*" may mean any separate building or space of a building, where the space is separated from the remainder of the building and used exclusively for telecommunications equipment. The telecommunications equipment within such a space must supply telephone service to other customer's buildings (i.e. The telecommunications equipment cannot solely supply the building containing the dedicated telephone equipment space). Adequate fire-separation from other building occupancies must be reviewed on a case-by-case basis if less than two-hour fire-resistive construction.

● Electrical Question of the Month

This Month's Question: In Washington State a "Low Voltage" Class 1 circuit cannot exceed ____ volts?
A) 12, B) 30, C) 50, D) 600.

Last Month's Question: Electrical products labeled by all Nationally Recognized Testing Laboratories (NRTL) are approved for use in Washington. True or False? **The answer is: False** [RCW 19.28.010(1) states "All materials, devices, appliances, and equipment used...shall be of a type that conforms to applicable standards or be indicated as acceptable by the established standards of any electrical product testing laboratory which is accredited by the department." and WAC 296-46A-092(11) states "Listed means equipment has been listed and identified by a laboratory approved by the state of Washington for the appropriate equipment standard per chapter 296-402A WAC". *Many NRTL labs choose not to do business in Washington and have not made application for approval in Washington. Their label is not valid for electrical installations under state or municipal jurisdiction.*]